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Federal Communications Commission
1919 M Street
Office of the Secretary
Washington, DC 20554

SUBJECT: Docket No. 94-102
RM-8143

Proctor & Associates has been an established manufacturer of communications equipment to the telephone industry for over 37 years. One of our principle lines of business is the E9-1-1 industry, in which we have been a major provider of PSAP ANI controllers, 9-1-1 network backup equipment, and, most recently, PBX 9-1-1 identification systems.

We have studied the Proposed Rule Making RM-8143 and offer our comments with regard to the first section, which would amend Part 68 to establish compatibility requirements between PBXs and enhanced 9-1-1 services.

Our recommended changes with a brief discussion of each recommendation follows:

68.320 Enhanced 911 compatibility: technical standards.

(a) Trunk Interface. Enhanced 911 trunks are analog two-wire or four wire channels supporting either E&M type 1, ~~or~~ E&M type 3 ~~signaling~~ **or loop reverse battery signaling**.

Discussion: Our experience has been that most of the two wire analog E911 tandem trunks are loop reverse battery. This also differentiates the E911 trunk from a loop start or ground start PBX line which will not support the required signaling.

(b) Station Number Identification signaling. The station number identification (SNI) code assigned to the emergency response location of a 911 caller will be sent from the registered equipment to the telephone company 911 system using multifrequency (MF) tone pulses **in CAMA format**. **CAMA format requires**

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transmission of the calling number when prompted by a solid off-hook indication from the telephone network. **CAMA format may optionally require transmission of the called number (911) when prompted by a momentary off-hook prior to transmission of the calling number.**

Discussion: Our experience has been that most of the E911 tandem offices require transmission of the called number in CAMA format.

(d) Equipment levels. The minimum number of Enhanced 911 emergency services trunks connecting a private switch to the telephone network shall be one (1) **trunk per each 10,000 stations served with a two trunk minimum**. ~~Additional trunks may be used at the user's option. Additional trunks shall be added to maintain an availability of P = 0.01 based on the number of users served.~~

Discussion: Our experience has been that 911 traffic is sporadic and impossible to predict accurately in small populations such as a small central office or a PBX. Most of the 911 trunk installations we have encountered use the rule of one trunk per 10,000 stations served with a two trunk minimum.

(e) Attendant Notification. Equipment manufactured or imported · · · must be capable of notifying an attendant or on-premises personnel, if present, and of providing station number identification and **optionally providing** emergency response location to the attendant when a 911 call is dialed.

Discussion: The use of local notification may be in conflict with privacy laws in some states since the PBX attendant is not part of the 911 PSAP. If this feature is provided it should be optional in order to prevent such conflicts.

(f) Information Requirements. Equipment manufactured or imported · · · must have the capability to provide the caller's station number identification~~, caller location identification, and call back number~~ to PSAP personnel.

Discussion: The caller's location and call back number is currently provided to PSAP personnel by the PSAP equipment. This is accomplished by the PSAP equipment transmitting the calling station's number to the telephone company database system and receiving the caller's location and call back number in return. The existing signaling protocols between the PBX, telephone company central office and PSAP can not accommodate this additional information.

(g) Labeling Requirements. . . . The domestic manufacture or importation of dispersed private telephone system equipment that does not comply with 68.320 **with either inherent capability or by the use of registered auxiliary units** must cease as of one year from the effective date of 68.320.

Discussion: Auxiliary products exist today that interface a wide variety of PBX systems with the 9-1-1 network. This technology has proven to be an effective solution to the problem of identifying a PBX caller in a manner entirely consistent with current PSAP operation. The FCC Rule should permit continued use of these products rather than force PBX manufactures to provide the added requirements with inherent capability.

Thank you for your consideration. Please forward any questions or comments to the undersigned.

Sincerely,

O. C. Lee
Vice President